

In the Claims

Applicants submit the claims as pending below.

Please add new claims 105-119.

1-27. (Canceled)

28. (Original) An array comprising spots of at least one type of protein attached to bovine serum albumin (BSA) coated onto a solid support, wherein the density of said array of proteins is at least 1000 spots per cm².

29. (Original) The array of claim 28, wherein the proteins are functional.

30. (Original) The array of claim 28, wherein a substantial fraction of the proteins are functional.

31. (Original) The array of claim 28, wherein the array comprises proteins that are properly folded into their natural conformation.

32. (Original) The array of claim 28, wherein the density of the array is at least 1500 spots per cm².

33. (Original) The array of claim 28, wherein the proteins are attached to the BSA through a non-covalent interaction.

34. (Original) The array of claim 28, wherein the proteins are attached to the BSA through a covalent interaction.

35. (Previously Presented) The array of claim 33 or 34, wherein said interaction is characterized in that the linkage is not cleaved during addition of a protein to be assayed in contact with the array and is inert to the protein.
36. (Original) The array of claim 33 or 34, whereby the interaction results in a substantial fraction of the arrayed proteins being functional.
37. (Original) The array of claim 34, wherein the covalent interaction is a Schiff's base linkage.
38. (Original) The array of claim 34, wherein the covalent interaction is generated by a transacylation reaction between the protein and a chemical moiety on the BSA.
39. (Original) The array of claim 34, wherein the covalent interaction is generated by a Michael addition.
40. (Original) The array of claim 34, wherein the covalent interaction is a disulfide bond.
41. (Original) The array of claim 33, wherein the non-covalent interaction is an epitope-antibody interaction.
42. (Original) The array of claim 33, wherein the non-covalent interaction is a poly-histidine-metal cation interaction.
43. (Original) The array of claim 33, wherein the non-covalent interaction is nonspecific.
44. (Original) The array of claim 28, wherein the solid support is glass.

45. (Original) The array of claim 28, wherein the solid support is a polymer.
46. (Original) The array of claim 28, wherein the solid support comprises a metal surface.
47. (Original) The array of claim 28, wherein the solid support comprises a self-assembled monolayer.
- 48-104. (Canceled)
105. (New) An article, comprising:
a solid support; and
a polymer immobilized on the solid support, the polymer being configured to become specifically attached to at least one type of chemically unmodified protein.
106. (New) The article of claim 105, wherein the polymer comprises a protein.
107. (New) The article of claim 106, wherein the protein comprises BSA.
108. (New) The article of claim 106, wherein the protein comprises caseine.
109. (New) The article of claim 105, wherein the polymer comprises at least one of a polyacrylamide, a dextran, a hydrogel, and a polysaccharide.
110. (New) The article of claim 105, further comprising a plurality of chemically unmodified proteins specifically attached to the polymer.
111. (New) The article of claim 110, wherein the plurality of chemically unmodified proteins are arranged in an array comprising a plurality of spots.

112. (New) The article of claim 111, wherein the array has a spot density of at least 1,000 spots per cm².

113. (New) The article of claim 112, wherein the array has a spot density of at least 1,500 spots per cm².

114. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through a covalent bond.

115. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through a non-covalent bond.

116. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through a primary amine of the chemically unmodified protein.

117. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through an alpha-amine of the chemically unmodified protein.

118. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through an amino group of a lysine on the chemically unmodified protein.

119. (New) The article of claim 110, wherein at least one of the plurality of chemically unmodified proteins is specifically attached to the polymer through a thiol on the chemically unmodified protein.